9 Fire & Water

CONCEPT
Water is continuously tested in the Santa Monica Mountains to track its condition throughout the year. Turbidity, pH, oxygen content, and temperature, are all indicators of the effects of fire.

OBJECTIVE
Students will be able to:
–identify water pH, turbidity, temperature, and oxygen and nitrate levels
–explain how water pH and temperature influence the plant and animal life of the water
–describe the effects of fire on the water

METHOD
Have students work in groups to read through their handout, conduct the lab, and answer the questions on their investigation worksheet.

MATERIALS
–Student Handout
–Student Investigation Worksheet
–see GLOBE protocols for Hydrology Study

DURATION
1 – 2 class sessions

Procedure

1. Have students read the *Fire & Water* handout.

2. Discuss the effects of fire on the plants and animals of the water environment.

GLOBE Hydrology Investigation

1. Divide the class into small groups and hand out materials to follow GLOBE protocols under the *GLOBE Hydrology Investigation* including water pH, turbidity, temperature, and nitrate and oxygen levels.

2. Have students complete all the questions on the *9–Student Investigation Worksheet.*

3. Have students present their answers.

4. Discuss the answers with the students.

Video Connections

GLOBE – Hydrology

Extensions

Visit www.Globe.gov/ for additional related activities under the GLOBE Teacher's Guide.

Key Words

Algae	Aquatic	Fauna	Flora
Groundwater	Habitat	Hydrology	Nitrate
Plankton	Sediment	Spawning	Terrain
Topography	Turbidity	Watershed	